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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

TORRES, JOSEPH D

ART UNIT PAPER NUMBER

2133

DATE MAILED: 03/01/2004 //

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/759,557

Applicant(s)

BARRY ET AL.

Examiner

Joseph D. Torres

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 February 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3,6,9-18,21,24-30 and 49 is/are pending in the application.
- 4a) Of the above claim(s) 49 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3,6,9-18,21 and 24-30 is/are rejected.
- 7) ☒ Claim(s) 10-13 and 25-28 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

1. Applicant's election without traverse of Group I, claims 1-3, 6, 9-18, 21 and 24-30 in Paper No. 10 is acknowledged.

Claim 49 is withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim.

Election was made **without** traverse in Paper No. 10.

This application contains claim 49 drawn to an invention nonelected without traverse in Paper No. 10. A complete reply to the final rejection must include cancelation of nonelected claims or other appropriate action (37 CFR 1.144) See MPEP § 821.01.

Oath/Declaration

2. In view of the copy of the Declaration filed 28 November 2003, the Examiner withdraws all objections to the Oath and Declaration.

Drawings

3. In view Amendment A filed 28 November 2003, the Examiner withdraws all objections to the drawings.

Response to Arguments

Applicant's arguments with respect to claims 1-3, 6, 9-18, 21 and 24-30 have been considered but are moot in view of the new ground(s) of rejection.

Claim Objections

4. Claims 10-13 and 25-28 are objected to because of the following informalities: Claim 1 recites, "utilizing the data stream to perform built-in self-test of the video display system in parallel with the functional verification of the video display system". The Examiner asserts that "utilizing the data stream to perform built-in self-test of the video display system" is a means for testing the functionality of the video display; hence "utilizing the data stream to perform built-in self-test of the video display system" is a means for "functional verification of the video display system". The Examiner asserts that it is not clear whether the method utilizes "the data stream to perform built-in self-test of the video display system" in parallel with using "the data stream to perform built-in self-test of the video display system" for "functional verification of the video display system" or whether the Applicant is attempting to claim the "functional verification of the video display system" using "the data stream to perform built-in self-test of the video display system" is done in parallel with another test for "functional verification of the video display system".

Claims 11-13 depend from claim 10, hence inherit the deficiencies of claim 10.

Claim 25 recites similar language as in claim 10.

Claims 26-28 depend from claim 25, hence inherit the deficiencies of claim 25.

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Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 10-13 and 25-28 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

On page 11 of Amendment A filed 28 November 2003, the Applicant contends, "the specification clearly distinguishes between a functional test and a built-in self test". The Examiner asserts that nowhere in the Application does the Applicant teach that a "functional test" cannot be part of a "built-in self test". In fact, the language in claim one explicitly contradicts the Applicant's contention since the Applicant explicitly claims, "a data stream to functionally verify a video display system" in the preamble of claim 1.

Claims 11-13 depend from claim 10, hence inherit the deficiencies of claim 10.

Claim 25 recites similar language as in claim 10.

Claims 26-28 depend from claim 25, hence inherit the deficiencies of claim 25.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 10-13 and 25-28 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

6. Claim 1 recites, "utilizing the data stream to perform built-in self-test of the video display system in parallel with the functional verification of the video display system".

The Examiner asserts that "utilizing the data stream to perform built-in self-test of the video display system" is a means for testing the functionality of the video display; hence "utilizing the data stream to perform built-in self-test of the video display system" is a means for "functional verification of the video display system". The Examiner asserts that it is not clear whether the method utilizes "the data stream to perform built-in self-test of the video display system" in parallel with using "the data stream to perform built-in self-test of the video display system" for "functional verification of the video display system" or whether the Applicant is attempting to claim the "functional verification of the video display system" using "the data stream to perform built-in self-test of the video display system" is done in parallel with another test for "functional verification of the video display system". Hence claim 1 is ambiguous and indefinite.

Where applicant acts as his or her own lexicographer to specifically define a term of a claim contrary to its ordinary meaning, the written description must clearly redefine the claim term and set forth the uncommon definition so as to put one reasonably skilled in the art on notice that the applicant intended to so redefine that claim term. *Process*

Control Corp. v. HydReclaim Corp., 190 F.3d 1350, 1357, 52 USPQ2d 1029, 1033 (Fed. Cir. 1999). On page 11 of Amendment A filed 28 November 2003, the Applicant contends, "the specification clearly distinguishes between a functional test and a built-in self test". The Examiner asserts that nowhere in the Application does the Applicant teach that a "functional test" cannot be part of a "built-in self test". The term is indefinite because the specification does not clearly redefine the term. In fact, the language in claim one explicitly contradicts the Applicant's contention since the Applicant explicitly claims, "a data stream to functionally verify a video display system" in the preamble of claim 1.

Claims 11-13 depend from claim 10, hence inherit the deficiencies of claim 10.

Claim 25 recites similar language as in claim 10.

Claims 26-28 depend from claim 25, hence inherit the deficiencies of claim 25.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 1-3, 10, 16-18 and 25 are rejected under 35 U.S.C. 102(b) as being anticipated by Wilensky; Barry F. et al. (US 4513318 A, hereafter referred to as Wilensky).

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35 U.S.C. 102(b) rejection of claims 1 and 16.

Wilensky teaches a method of generating a data stream to functionally verify a video display system (see Abstract, Wilensky), the method comprising:

detecting a data selection signal (Claim 1 in Wilensky teaches that a "high level statement of a pattern" is issued to select a test pattern; hence "high level statement of a pattern" is a data selection signal); and responsive to the data selection signal, providing the data stream to the video display system (col. 8, lines 57-68 in Wilensky teaches that a test pattern is generated for the video display system in response to the high level statement data selection signal), wherein the providing of the data stream includes composing the data stream utilizing a combination of algorithmically generated data (Claim 1 in Wilensky teaches that the data stream utilizes algorithmically generated pattern segment data: Note: Claim 1 explicitly provides an algorithm for constructing new pattern segments) and stored data (col. 8, lines 57-68 in Wilensky teaches that stored character data is utilized to produce the data stream) to produce a video test pattern (see Figure 1 in Wilensky).

Note: Figure 4 in Wilensky is a data stream generator.

35 U.S.C. 102(b) rejection of claims 2, 3, 17 and 18.

The shift register in Figure 4 in Wilensky is a state machine; hence Wilensky teaches the providing of the data stream is performed utilizing state machine generated data (Note: sequential logic such as shift registers are state machines).

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35 U.S.C. 102(b) rejection of claims 10 and 25.

Col. 6, lines 35-36 in Wilensky teach that the test is a built-in self-test. The Examiner asserts that "utilizing the data stream to perform built-in self-test of the video display system" is a means for testing the functionality of the video display; hence "utilizing the data stream to perform built-in self-test of the video display system" is a means for "functional verification of the video display system".

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
 2. Ascertaining the differences between the prior art and the claims at issue.
 3. Resolving the level of ordinary skill in the pertinent art.
 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
8. Claims 6, 9, 21 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wilensky; Barry F. et al. (US 4513318 A, hereafter referred to as Wilensky).

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35 U.S.C. 103(a) rejection of claims 6 and 21.

Wilensky, substantially teaches the claimed invention described in claims 1-3, 10, 16-18 and 25 (as rejected above).

However Wilensky, does not explicitly teach the specific use of data packets for providing the test pattern data stream taught in the Wilensky patent.

The Examiner asserts that use of data packets to distribute the test pattern data stream taught in the Wilensky patent would be an obvious engineering design choice based on the relevant communication protocols being used for the system. One of ordinary skill in the art at the time the invention was made would have been highly motivated to use data packets to distribute the test pattern data stream taught in the Wilensky patent in order to be compliant with relevant communication protocols being used for the system. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of Wilensky by including use of data packets for providing the test pattern data stream taught in the Wilensky patent. This modification would have been obvious to one of ordinary skill in the art, at the time the invention was made, because one of ordinary skill in the art would have recognized that use of data packets for providing the test pattern data stream taught in the Wilensky patent would have provided the opportunity to maintain compliance with relevant communication protocols being used for the system.

35 U.S.C. 103(a) rejection of claims 9 and 24.

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Wilensky, substantially teaches the claimed invention described in claims 1-3, 6, 10, 16-18, 21 and 25 (as rejected above).

However Wilensky, does not explicitly teach that the video display system taught in the Wilensky patent comprises any one of a group of including a SMPTE-259M, SMPTE-292M and a Digital Video Interface (DVI) device.

The Examiner asserts that use of the pattern generator taught in the Wilensky patent for SMPTE-259M, SMPTE-292M or Digital Video Interface (DVI) compliant devices does not deviate from the scope or the intent of the teachings in the Wilensky patent since SMPTE-259M, SMPTE-292M or Digital Video Interface (DVI) compliant devices are still video display systems and the pattern generator taught in the Wilensky patent is for video display systems. Furthermore; one of ordinary skill in the art at the time the invention was made would have recognized that SMPTE-259M, SMPTE-292M or Digital Video Interface (DVI) compliant devices are video display systems and would have recognized that the pattern generator taught in the Wilensky patent is designed for video display systems.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of Wilensky by including use of the pattern generator taught in the Wilensky patent in SMPTE-259M, SMPTE-292M or Digital Video Interface (DVI) compliant devices. This modification would have been obvious to one of ordinary skill in the art, at the time the invention was made, because one of ordinary skill in the art would have recognized that use of the pattern generator taught in the Wilensky patent in SMPTE-259M, SMPTE-292M or Digital Video Interface (DVI)

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compliant devices would have provided the opportunity to verify SMPTE-259M, SMPTE-292M or Digital Video Interface (DVI) compliant video systems using the pattern generator taught in the Wilensky patent since the pattern generator taught in the Wilensky patent is explicitly designed for video display systems.

9. Claims 11-15 and 26-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wilensky; Barry F. et al. (US 4513318 A, hereafter referred to as Wilensky) in view of Jarwala, Najmi T. et al. (US 5444716 A, hereafter referred to as Jarwala).

35 U.S.C. 103(a) rejection of claims 11 and 26.

Wilensky, substantially teaches the claimed invention described in claims 1-3, 6, 9, 10, 16-18, 21, 24 and 25 (as rejected above).

However Wilensky, does not explicitly teach the specific use of a checksum generator. Jarwala, in an analogous art, teaches the use of checksum generators whereby verification is performed by checking if the checksum values match (Col. 7, lines 5-40 in Jarwala). Note: in col. 7, lines 37-40, Jarwala teaches that checksum can be used to verify the test program's integrity. One of ordinary skill in the art at the time the invention was made would have been highly motivated to combine the teaching in the Jarwala patent with the teachings in the Wilenski patent to ensure the integrity of the test pattern data in the Wilenski patent (col. 7, lines 37-40, Jarwala).

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Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Wilenski with the teachings of Jarwala by including use of a checksum generator. This modification would have been obvious to one of ordinary skill in the art, at the time the invention was made, because one of ordinary skill in the art would have recognized that use of a checksum generator would provide the opportunity to ensure the integrity of the test pattern data in the Wilenski patent (col. 7, lines 37-40, Jarwala).

35 U.S.C. 103(a) rejection of claims 12 and 27.

Col. 7, lines 5-40 in Jarwala teach the use of checksum generators whereby verification is performed by checking if the checksum values match.

35 U.S.C. 103(a) rejection of claims 13 and 28.

CRC is a block code, hence; the CRC checksum is performed for each block within the data stream, each block being a specific point within the data stream.

35 U.S.C. 103(a) rejection of claims 14 and 29.

The Abstract in Jarwala teaches that test information is sent to the host; note: test data is test information.

35 U.S.C. 103(a) rejection of claims 15 and 30.

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A digital television system is still a digital system (see rejections to claims 1, 4 16 and 19, above).

Conclusion

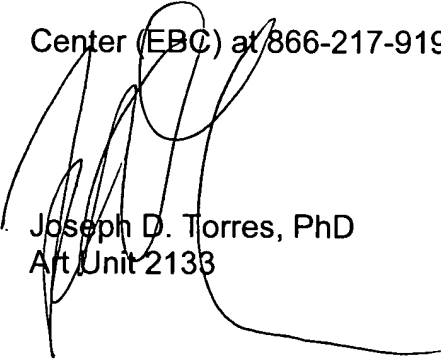
10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Klingelhofer; Marc (US 5055928 A) teaches testing of digital video frame recorders used for buffering digital video signal data on a frame-by-frame basis. Maggi; Joseph A. et al. (US 4554636 A) teaches internal self-testing is provided for a test instrument in which data, in digital and in analog form, is sampled from various test points.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a). A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph D. Torres whose telephone number is (703) 308-7066. The examiner can normally be reached on M-F 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Albert Decady can be reached on (703) 305-9595. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



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